

AMENDMENTS TO THE CLAIMS

Please amend claims 1-7, cancel claims 8-31, and add new claims 32-48, as shown below.

1. (Currently amended) A method for responding to a request to transfer data between a first virtual machine (VM) in a virtual computer system and a data storage unit within a multipath data storage system, the method comprising:

- determining ~~a plurality of multipath routing information related to~~ possible paths over which the data could ~~may~~ be routed;
- determining that a failure has occurred that prevents the transfer of data over a first path of the plurality of possible paths;
- determining VM-specific information related to the first VM ~~in the virtual computer system; and~~
- ~~based on the multipath routing information and the VM-specific information, deciding whether to route the data transfer request; and~~
- ~~if a decision is made to route the data transfer request, then, based on the multipath routing information and the VM-specific information, selecting a path over which to route the data.~~
- in response to the determination that the failure has occurred that prevents the transfer of data over the first path, suspending the first VM.

2. (Currently amended) The method of claim 1, further comprising, in response to the determination that the failure has occurred that prevents the transfer of data over the first path, failing over to one or more alternate paths, in which the VM-specific information indicates an amount of disk bandwidth that is allocated to the VM.

3. (Currently amended) The method of claim 1, wherein the data is not routed to the data storage unit 2, in which a decision is made not to route the data transfer request because routing the data transfer request would cause the VM's allocation of disk bandwidth to be exceeded.

1 4. (Currently amended) The method of claim 1, in which the VM-specific
2 information indicates the first VM's priority relative to other virtual machines.

1 5. (Currently amended) The method of claim 4, wherein the first VM is
2 determined to have a lower priority than one or more other virtual machines 4, in which
3 the multipath routing information indicates the available paths over which the data may
4 be routed.

1 6. (Currently amended) The method of claim 1, wherein the first VM is
2 suspended until the failure is corrected 5, in which the multipath routing information
3 further indicates a pending data transfer load for each of the available paths over which
4 the data may be routed.

1 7. (Currently amended) The method of claim 2, wherein the first VM is
2 suspended until a failback occurs 1, in which a load distribution function, based on the
3 multipath routing information and the VM-specific information, is used in selecting a path
4 over which to route the data.

Claims 8-31 (Cancelled)

1 32. (New) A method for responding to a request to transfer data between a
2 first virtual machine (VM) in a virtual computer system and a data storage unit within a
3 multipath data storage system, the method comprising:

4 determining a plurality of possible paths over which the data could be
5 routed;

6 determining that a failure has occurred that prevents the transfer of data
7 over a first path of the plurality of possible paths;

8 determining VM-specific information related to the first VM; and
9 in response to the determination that the failure has occurred that
10 prevents the transfer of data over the first path, migrating the first VM to a
11 different physical computer.

1 33. (New) The method of claim 32, further comprising, in response to the
2 determination that the failure has occurred that prevents the transfer of data over the
3 first path, failing over to one or more alternate paths.

1 34. (New) The method of claim 32, wherein the data is not routed to the data
2 storage unit.

1 35. (New) The method of claim 32, in which the VM-specific information
2 indicates the first VM's priority relative to other virtual machines.

1 36. (New) The method of claim 35, wherein the first VM is determined to have
2 a lower priority than one or more other virtual machines.

1 37. (New) A computer program embodied in a computer-readable medium,
2 the computer program being executable in a virtual computer system in support of one
3 or more virtual machines (VMs), the computer program performing a method for
4 responding to a request to transfer data between a first VM in the virtual computer
5 system and a data storage unit within a multipath data storage system, the method
6 comprising:

7 determining a plurality of possible paths over which the data could be
8 routed;

9 determining that a failure has occurred that prevents the transfer of data
10 over a first path of the plurality of possible paths;

11 determining VM-specific information related to the first VM in the virtual
12 computer system; and

13 in response to the determination that the failure has occurred that
14 prevents the transfer of data over the first path, suspending the first VM.

1 38. (New) The computer program of claim 37, wherein the method further
2 comprises, in response to the determination that the failure has occurred that prevents
3 the transfer of data over the first path, failing over to one or more alternate paths.

1 39. (New) The computer program of claim 37, wherein the data is not routed
2 to the data storage unit.

1 40. (New) The computer program of claim 37, in which the VM-specific
2 information indicates the first VM's priority relative to other virtual machines.

1 41. (New) The computer program of claim 40, wherein the first VM is
2 determined to have a lower priority than one or more other virtual machines.

1 42. (New) The computer program of claim 37, wherein the first VM is
2 suspended until the failure is corrected.

1 43. (New) The computer program of claim 38, wherein the first VM is
2 suspended until a fallback occurs.

1 44. (New) A computer program embodied in a computer-readable medium,
2 the computer program being executable in a virtual computer system in support of one
3 or more virtual machines (VMs), the computer program performing a method for
4 responding to a request to transfer data between a first VM in the virtual computer
5 system and a data storage unit within a multipath data storage system, the method
6 comprising:

7 determining a plurality of possible paths over which the data could be
8 routed;

9 determining that a failure has occurred that prevents the transfer of data
10 over a first path of the plurality of possible paths;

11 determining VM-specific information related to the first VM; and
12 in response to the determination that the failure has occurred that
13 prevents the transfer of data over the first path, migrating the first VM to a
14 different physical computer.

1 45. (New) The computer program of claim 44, wherein the method further
2 comprises, in response to the determination that the failure has occurred that prevents
3 the transfer of data over the first path, failing over to one or more alternate paths.

1 46. (New) The computer program of claim 44, wherein the data is not routed
2 to the data storage unit.

1 47. (New) The computer program of claim 44, in which the VM-specific
2 information indicates the first VM's priority relative to other virtual machines.

1 48. (New) The computer program of claim 47, wherein the first VM is
2 determined to have a lower priority than one or more other virtual machines.